

CALIFORNIA WILDLIFE HABITAT RELATIONSHIPS SYSTEM
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M109 Desert Kangaroo Rat *Dipodomys deserti*
Family: Heteromyidae Order: Rodentia Class: Mammalia

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DISTRIBUTION, ABUNDANCE, AND SEASONALITY

In California, discontinuously distributed in the southeastern part of the state. Locally abundant. Occurs north to Olancha and Keeler, Inyo Co., and west to Palmdale, Los Angeles Co., Hesperia, San Bernardino Co., and Borrego Springs, San Diego Co. Found in a variety of desert scrub habitats, the common factor being a substrate of wind-drifted sand, probably not less than 50 cm (20 in) deep (Hall 1946). Preferred canopy is sparse to moderate. Less common in denser stands.

SPECIFIC HABITAT REQUIREMENTS

Feeding: Cheek pouch contents have included the seeds and heads of *Glyptopleura*; the seeds of *Lupinus*, *Gilia*, *Larrea*, and *Artemisia*; and plant parts of *Atriplex* and *Penstemon* (Hall 1946). Brown and Lieberman (1973) found that *D. deserti*, in southern Arizona, selected seeds that averaged 45 mm (0.16-0.20 in) in diameter. Most foraging is done between shrubs. Olfaction and surface cues appear to be important to kangaroo rats searching for subsurface seed caches.

Cover: Burrows are excavated at bases of shrubs or in soil banks in wind-drifted sand. There may be 6-12 entrances, about 10 cm (4 in) in diameter, which are plugged with sand during the day. Burrows seldom deeper than 60 cm (24 in) (Hall 1946, Miller and Stebbins 1964).

Reproduction: Nesting takes place in the burrow.

Water: Water is obtained from metabolism of food and from moisture in food.

Pattern: Sparse desert scrub with deep wind-drifted sand.

SPECIES LIFE HISTORY

Activity Patterns: Active year-round. Crepuscular and nocturnal.

Seasonal Movements/Migration: None.

Home Range: Grinnell (1937) reported a density of 3.2 individuals per 40 ha (100 ac) in Death Valley.

Territory: No data found.

Reproduction: Young usually born March through June. Breeding occurs in the first yr following birth, although both males and females may, under the best of conditions, breed

several mo after birth (Haley 1964). The gestation period is 29-32 days (Butterworth 1961). An average of 4 young born to each female, ranging from 3-5 (Hall 1946). Weaning is from 3-4 wk following birth. Life span under natural conditions probably averages 3-5 yr.

Niche: *D. deserti* is one of the largest of California's kangaroo rats. In field and lab trials, shown to be dominant over other *Dipodomys* and *Perognathus*. Predators include coyotes, foxes, badgers, snakes, owls.

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